

SW-CMM - Level 2 Evaluation Criteria

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	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
KPA: 2.1 Requirements Management											
2.1.1	The project follows a written organizational policy for managing the system requirements allocated to software.	RM.CO.1 (pg L2-2)									
2.1.2	For each project, responsibility is established for analyzing the system requirements and allocating them to hardware, software and other system components.	RM.AB.1 (pg L2-3)									
2.1.3	The allocated requirements are documented.	RM.AB.2 (pg L2-4)									
2.1.4	Adequate resources and funding are provided for managing the allocated requirements.	RM.AB.3 (pg L2-5)									
2.1.5	Members of the software engineering group and other software-related groups are trained to perform their requirements management activities.	RM.AB.4 (pg L2-5)									
2.1.6	The software engineering group reviews the allocated requirements before they are incorporated into the software project.	RM.AC.1 (pg L2-5)									
2.1.7	The software engineering group uses the allocated requirements as the basis for software plans, work products, and activities.	RM.AC.2 (pg L2-6)									
2.1.8	Changes to the allocated requirements are reviewed and incorporated into the software project.	RM.AC.3 (pg L2-7)									
2.1.9	Measurements are made and used to determine the status of the activities for managing the allocated requirements.	RM.ME.1 (pg L2-8)									
2.1.10	The activities for managing the allocated requirements are reviewed with senior management on a periodic basis.	RM.VE.1 (pg L2-9)									
2.1.11	The activities for managing the allocated requirements are reviewed with the project manager on both a periodic and event-driven basis.	RM.VE.2 (pg L2-9)									

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	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
2.1.12	The software quality assurance group reviews and/or audits activities and work products for managing the allocated requirements and reports the results.	RM.VE.3 (pg L2-9)									

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KPA: 2.2 Software Project Planning											
2.2.1	A project software manager is designated to be responsible for negotiating commitments and developing the project's software development plan.	SPP.CO.1 (pg L2-12)									
2.2.2	The project follows a written organizational policy for planning a software project.	SPP.CO.2 (pg L2-12)									
2.2.3	A documented and approved statement of work exists for the software project.	SPP.AB.1 (pg L2-14)									
2.2.4	Responsibilities for developing the software development plan are assigned.	SPP.AB.2 (pg L2-15)									
2.2.5	Adequate resources and funding are provided for planning the software project.	SPP.AB.3 (pg L2-16)									
2.2.6	The software managers, software engineers, and other individuals involved in the software project planning are trained in the software estimating and planning procedures applicable to their areas of responsibility.	SPP.AB.4 (pg L2-16)									
2.2.7	The software engineering group participates on the project proposal team.	SPP.AC.1 (pg L2-16)									
2.2.8	Software project planning is initiated in the early stages of, and in parallel with, the overall project planning.	SPP.AC.2 (pg L2-17)									
2.2.9	The software engineering group participates with other affected groups in the overall project planning throughout the project's life.	SPP.AC.3 (pg L2-17)									
2.2.10	Software project commitments made to individuals and groups external to the organization are reviewed with senior management according to a documented procedure.	SPP.AC.4 (pg L2-17)									
2.2.11	A software life cycle with predefined stages of manageable size is identified or defined.	SPP.AC.5 (pg L2-17)									

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2.2.12	The project's software development plan is developed according to a documented procedure.	SPP.AC.6 (pg L2-18)									
2.2.13	The plan for the software project is documented.	SPP.AC.7 (pg L2-19)									
2.2.14	Software work products that are needed to establish and maintain control of the software project are identified.	SPP.AC.8 (pg L2-20)									
2.2.15	Estimates for the size of the <u>software work products</u> (or changes to the size of software work products) are derived according to a documented procedure.	SPP.AC.9 (pg L2-21)									
2.2.16	Estimates for the software project's <u>effort and costs</u> are derived according to a documented procedure.	SPP.AC.10 (pg L2-22)									
2.2.17	Estimates for the project's <u>critical computer resources</u> are derived according to a documented procedure.	SPP.AC.11 (pg L2-23)									
2.2.18	The project's software schedule is derived according to a documented procedure.	SPP.AC.12 (pg L2-24)									
2.2.19	The software risks associated with the cost, resource, schedule, and technical aspects of the project are identified, assessed, and documented.	SPP.AC.13 (pg L2-24)									
2.2.20	Plans for the project's software engineering facilities and support tools are prepared.	SPP.AC.14 (pg L2-25)									
2.2.21	Software planning data are recorded.	SPP.AC.15 (pg L2-25)									
2.2.22	Measurements are made and used to determine the status of the software planning activities.	SPP.ME.1 (pg L2-26)									

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2.2.23	The activities for software project planning are reviewed with senior management on a periodic basis.	SPP.VE.1 (pg L2-26)									
2.2.24	The activities for software project planning are reviewed with the project manager on both a periodic and event-driven basis.	SPP.VE.2 (pg L2-27)									
2.2.25	The software quality assurance group reviews and/or audits the activities and work products for software project planning and reports the results.	SPP.VE.3 (pg L2-27)									

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	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
KPA: 2.3 Software Project Tracking and Oversight											
2.3.1	A project software manager is designated to be responsible for the project's software activities and results.	SPTO.CO.1 (pg L2-32)									
2.3.2	The project follows a written organizational policy for managing the software project.	SPTO.CO.2 (pg L2-32)									
2.3.3	A software development plan for the software project is documented and approved.	SPTO.AB.1 (pg L2-33)									
2.3.4	The project software manager explicitly assigns responsibility for software work products and activities.	SPTO.AB.2 (pg L2-33)									
2.3.5	Adequate resources and funding are provided for tracking the software project.	SPTO.AB.3 (pg L2-34)									
2.3.6	The software managers are trained in managing the technical and personnel aspects of the software project.	SPTO.AB.4 (pg L2-34)									
2.3.7	First-line software managers receive orientation in the technical aspects of the software project.	SPTO.AB.5 (pg L2-34)									
2.3.8	A documented software development plan is used for tracking the software activities and communicating status.	SPTO.AC.1 (pg L2-35)									
2.3.9	The project's software development plan is revised according to a documented procedure.	SPTO.AC.2 (pg L2-35)									
2.3.10	Software project commitments and changes to commitments made to individuals and groups external to the organization are reviewed with senior management according to a documented procedure.	SPTO.AC.3 (pg L2-37)									

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	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
2.3.11	Approved changes to commitments that affect the software project are communicated to the members of the software engineering group and other software-related groups.	SPTO.AC.4 (pg L2-37)									
2.3.12	The size of the software work products (or size of the changes to the software work products) are tracked, and corrective actions are taken as necessary.	SPTO.AC.5 (pg L2-37)									
2.3.13	The project's software <u>effort and costs</u> are tracked, and corrective actions are taken as necessary.	SPTO.AC.6 (pg L2-38)									
2.3.14	The project's <u>critical computer resources</u> are tracked, and corrective actions are taken as necessary.	SPTO.AC.7 (pg L2-38)									
2.3.15	The project's <u>software schedule</u> is tracked, and corrective actions are taken as necessary.	SPTO.AC.8 (pg L2-39)									
2.3.16	Software engineering technical activities are tracked, and corrective actions are taken as necessary.	SPTO.AC.9 (pg L2-39)									
2.3.17	The software risks associated with cost, resource, schedule, and technical aspects of the project are tracked.	SPTO.AC.10 (pg L2-40)									
2.3.18	Actual measurement data and replanning data for the software project are recorded.	SPTO.AC.11 (pg L2-40)									
2.3.19	The software engineering group conducts periodic internal reviews to track technical progress, plans, performance, and issues against the software development plan.	SPTO.AC.12 (pg L2-40)									
2.3.20	Formal reviews to address the accomplishments and results of the software project are conducted at selected project milestones according to a documented procedure.	SPTO.AC.13 (pg L2-41)									
2.3.21	Measurements are made and used to determine the status of the software tracking and oversight activities.	SPTO.ME.1 (pg L2-42)									

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	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
2.3.22	The activities for software project tracking and oversight are reviewed with senior management on a periodic basis.	SPTO.VE.1 (pg L2-42)									
2.3.23	The activities for software project tracking and oversight are reviewed with the project manager on both a periodic and event-driven basis.	SPTO.VE.2 (pg L2-43)									
2.3.24	The software quality assurance group reviews and/or audits the activities and work products for software project tracking and oversight and reports the results.	SPTO.VE.3 (pg L2-43)									

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KPA: 2.4 Software Subcontract Management											
2.4.1	The project follows a written organizational policy for managing the software subcontract.	SSM.CO.1 (pg L2-46)									
2.4.2	A subcontract manager is designated to be responsible for establishing and managing the software subcontract.	SSM.CO.2 (pg L2-47)									
2.4.3	Adequate resources and funding are provided for selecting the software subcontractor and managing the subcontract.	SSM.AB.1 (pg L2-48)									
2.4.4	Software managers and other individuals who are involved in establishing and managing the software subcontract are trained to perform these activities.	SSM.AB.2 (pg L2-48)									
2.4.5	Software managers and other individuals who are involved in managing the software subcontract resolve orientation in the technical aspects of the subcontract.	SSM.AB.3 (pg L2-48)									
2.4.6	The work to be subcontracted is defined and planned according to a documented procedure.	SSM.AC.1 (pg L2-49)									
2.4.7	The software subcontractor is selected, based on an evaluation of the subcontract bidders' ability to perform the work, according to a documented procedure.	SSM.AC.2 (pg L2-51)									
2.4.8	The contractual agreement between the prime contractor and the software subcontractor is used as the basis for managing the subcontract.	SSM.AC.3 (pg L2-52)									
2.4.9	A documented subcontractor's software development plan is reviewed and approved by the prime contractor.	SSM.AC.4 (pg L2-53)									
2.4.10	A documented and approved subcontractor's software development plan is used for tracking the software activities and communicating status.	SSM.AC.5 (pg L2-54)									
2.4.11	Changes to the software subcontractor's statement of work, subcontract terms and conditions, and other commitments are resolved according to a documented procedure.	SSM.AC.6 (pg L2-54)									

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	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
2.4.12	The prime contractor's management conducts status/coordination reviews with the software subcontractor's management.	SSM.AC.7 (pg L2-54)									
2.4.13	Periodic technical reviews and interchanges are held with the software subcontractor.	SSM.AC.8 (pg L2-55)									
2.4.14	Formal reviews to address the subcontractor's software engineering accomplishments and results are conducted at selected milestones according to a documented procedure.	SSM.AC.9 (pg L2-55)									
2.4.15	The prime contractor's software quality assurance group monitors the subcontractor's software quality assurance activities according to a documented procedure.	SSM.AC.10 (pg L2-56)									
2.4.16	The prime contractor's software configuration management group monitors the subcontractor's activities for software configuration management according to a documented procedure.	SSM.AC.11 (pg L2-56)									
2.4.17	The prime contractor conducts acceptance testing as part of the delivery of the subcontractor's software products according to a documented procedure.	SSM.AC.12 (pg L2-57)									
2.4.18	The software subcontractor's performance is evaluated on a periodic basis, and the evaluation is reviewed with the subcontractor.	SSM.AC.13 (pg L2-57)									
2.4.19	Measurements are made and used to determine the status of the activities for managing the software subcontract.	SSM.ME.1 (pg L2-58)									
2.4.20	The activities for managing the software subcontract are reviewed with senior management on a periodic basis.	SSM.VE.1 (pg L2-58)									
2.4.21	The activities for managing the software subcontract are reviewed with the project manager on both a periodic and event-driven basis.	SSM.VE.2 (pg L2-59)									
2.4.22	The software quality assurance group reviews and/or audits the activities and work products for managing the software subcontract and reports the results.	SSM.VE.3 (pg L2-59)									

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KPA: 2.5 Software Quality Assurance											
2.5.1	The project follows a written organizational policy for implementing software quality assurance (SQA).	SQA.CO.1 (pg L2-64)									
2.5.2	A group that is responsible for coordinating and implementing SQA for the project (i.e., the SQA group) exists.	SQA.AB.1 (pg L2-65)									
2.5.3	Adequate resources and funding are provided for performing the SQA activities.	SQA.AB.2 (pg L2-66)									
2.5.4	Members of the SQA group are trained to perform their SQA activities.	SQA.AB.3 (pg L2-66)									
2.5.5	The members of the software project receive orientation on the role, responsibilities, authority, and value of the SQA group.	SQA.AB.4 (pg L2-67)									
2.5.6	A SQA plan is prepared for the software project according to a documented procedure.	SQA.AC.1 (pg L2-67)									
2.5.7	The SQA group's activities are performed in accordance with the SQA plan.	SQA.AC.2 (pg L2-68)									
2.5.8	The SQA group participates in the preparation and review of the project's software development plan, standards, and procedures.	SQA.AC.3 (pg L2-70)									
2.5.9	The SQA group reviews the software engineering activities to verify compliance.	SQA.AC.4 (pg L2-70)									
2.5.10	The SQA group audits designated software work products to verify compliance.	SQA.AC.5 (pg L2-70)									
2.5.11	The SQA group periodically reports the results of its activities to the software engineering group.	SQA.AC.6 (pg L2-71)									

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	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
2.5.12	Deviations identified in the software activities and software work products are documented and handled according to a documented procedure.	SQA.AC.7 (pg L2-71)									
2.5.13	The SQA group conducts periodic reviews of its activities and findings with the customer's SQA personnel, as appropriate.	SQA.AC.8 (pg L2-71)									
2.5.14	Measurements are made and used to determine the cost and schedule status of the SQA activities.	SQA.ME.1 (pg L2-72)									
2.5.15	The SQA activities are reviewed with senior management on a periodic basis.	SQA.VE.1 (pg L2-72)									
2.5.16	The SQA activities are reviewed with the project manager on both a periodic and event-driven basis.	SQA.VE.2 (pg L2-73)									
2.5.17	Experts independent of the SQA group periodically review the activities and software work products of the project's SQA group.	SQA.VE.3 (pg L2-73)									

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KPA: 2.6 Software Configuration Management											
2.6.1	The project follows a written organizational policy for implementing software configuration management (SCM).	SCM.CO.1 (pg L2-76)									
2.6.2	A board having the authority for managing the project's software baselines (i.e., a software configuration control board - SCCB) exists or is established.	SCM.AB.1 (pg L2-77)									
2.6.3	A group that is responsible for coordinating and implementing SCM for the project (i.e., the SCM group) exists.	SCM.AB.2 (pg L2-78)									
2.6.4	Adequate resources and funding are provided for performing the SCM activities.	SCM.AB.3 (pg L2-80)									
2.6.5	Members of the SCM group are trained in the objectives, procedures, and methods for performing their SCM activities.	SCM.AB.4 (pg L2-80)									
2.6.6	Members of the software engineering group and other software-related groups are trained to perform their SCM activities.	SCM.AB.5 (pg L2-80)									
2.6.7	A SCM plan is prepared for each software project according to a documented procedure.	SCM.AC.1 (PG I2-81)									
2.6.8	A documented and approved SCM plan is used as the basis for performing the SCM activities.	SCM.AC.2 (pg L2-81)									
2.6.9	A configuration management library system is established as a repository for the software baselines.	SCM.AC.3 (pg L2-82)									
2.6.10	The software work products to be placed under configuration management are identified.	SCM.AC.4 (pg L2-83)									
2.6.11	Change requests and problem reports for all configuration items/units are initiated, recorded, reviewed, approved, and tracked according to a documented procedure.	SCM.AC.5 (pg L2-84)									

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2.6.12	Changes to baselines are controlled according to a documented procedure.	SCM.AC.6 (pg L2-84)									
2.6.13	Products from the software baseline library are created and their release is controlled according to a documented procedure.	SCM.AC.7 (pg L2-85)									
2.6.14	The status of configuration items/units is recorded according to a documented procedure.	SCM.AC.8 (pg L2-85)									
2.6.15	Standard reports documenting the SCM activities and the contents of the software baseline are developed and made available to affected groups and individuals.	SCM.AC.9 (pg L2-85)									
2.6.16	Software baseline audits are conducted according to a documented procedure.	SCM.AC.10 (pg L2-86)									
2.6.17	Measurements are made and used to determine the status of the SCM activities.	SCM.ME.1 (pg L2-87)									
2.6.18	The SCM activities are reviewed with senior management on a periodic basis.	SCM.VE.1 (pg L2-87)									
2.6.19	The SCM activities are reviewed with the project manager on both a periodic and event-driven basis.	SCM.VE.2 (pg L2-88)									
2.6.20	The SCM group periodically audits software baselines to verify that they conform to the documentation that defines them.	SCM.VE.3 (pg L2-88)									
2.6.21	The software quality assurance group reviews and/or audits the activities and work products for SCM and reports the results.	SCM.VE.4 (pg L2-88)									

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KPA: 3.1 Organization Process Focus											
3.1.1	The organization follows a written organizational policy for coordinating software process development and improvement activities across the organization.	OPF.CO.1 (pg L3-2)									
3.1.2	Senior management sponsors the organization's activities for software process development and improvement.	OPF.CO.2 (pg L3-2)									
3.1.3	Senior management oversees the organization's activities for software process development and improvement.	OPF.CO.3 (pg L3-3)									
3.1.4	A group that is responsible for the organization's software process activities exists.	OPF.AB.1 (pg L3-3)									
3.1.5	Adequate resources and funding are provided for the organization's software process activities.	OPF.AB.2 (pg L3-4)									
3.1.6	Members of the group responsible for the organization's software process activities receive required training to perform these activities.	OPF.AB.3 (pg L3-5)									
3.1.7	Members of the <u>software engineering group</u> and other software-related groups receive orientation on the organization's software process activities and their roles in those activities.	OPF.AB.4 (pg L3-6)									
3.1.8	The software process is assessed periodically, and action plans are developed to address the assessment findings.	OPF.AC.1 (pg L3-6)									
3.1.9	The organization develops and maintains a plan for its software process development and improvement activities.	OPF.AC.2 (pg L3-7)									
3.1.10	The organization's and projects' activities for developing and improving their software processes are coordinated at the organization level.	OPF.AC.3 (pg L3-7)									
3.1.11	The use of the organization's software process database is coordinated at the organizational level.	OPF.AC.4 (pg L3-8)									

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3.1.12	New processes, methods, and tools in limited use in the organization are monitored, evaluated, and, where appropriate, transferred to other parts of the organization.	OPF.AC.5 (pg L3-8)									
3.1.13	Training for the organization's and projects' software processes is coordinated across the organization.	OPF.AC.6 (pg L3-8)									
3.1.14	The groups involved in implementing the software processes are informed of the organization's and projects' activities for software process development and improvement.	OPF.AC.7 (pg L3-9)									
3.1.15	Measurements are made and used to determine the status of the organization's process development and improvement activities.	OPF.ME.1 (pg L3-9)									
3.1.16	The activities for software process development and improvement are reviewed with senior management on a periodic basis.	OPF.VE.1 (pg L3-10)									

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KPA: 3.2 Organization Process Definition											
3.2.1	The organization follows a written policy for developing and maintaining a standard software process and related process assets.	OPD.CO.1 (pg L3-12)									
3.2.2	Adequate resources and funding are provided for developing and maintaining the organization's standard software process and related process assets.	OPD.AB.1 (pg L3-14)									
3.2.3	The individuals who develop and maintain the organization's standard software process and related process assets receive required training to perform these activities.	OPD.AB.2 (pg L3-14)									
3.2.4	The organization's standard software process is developed and maintained according to a documented procedure.	OPD.AC.1 (pg L3-15)									
3.2.5	The organization's standard software process is documented according to established organization standards.	OPD.AC.2 (pg L3-17)									
3.2.6	Descriptions of software life cycles that are approved for use by the projects are documented and maintained.	OPD.AC.3 (pg L3-18)									
3.2.7	Guidelines and criteria for the projects' tailoring of the organization's standard software process are developed and maintained.	OPD.AC.4 (pg L3-19)									
3.2.8	The organization's software process database is established and maintained.	OPD.AC.5 (pg L3-20)									
3.2.9	A library of software process-related documentation is established and maintained.	OPD.AC.6 (pg L3-22)									
3.2.10	Measurements are made and used to determine the status of the organization's process definition activities.	OPD.ME.1 (pg L3-23)									

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3.2.11	The software quality assurance group reviews and/or audits the organization's activities and work products for developing and maintaining the organization's standard software process and related process assets and reports the results.	OPD.VE.1 (pg L3-23)									

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KPA: 3.3 Training Program											
3.3.1	The organization follows a written policy for meeting its training needs.	TP.CO.1 (pg L3-26)									
3.3.2	A group responsible for fulfilling the training needs of the organization exists.	TP.AB.1 (pg L3-27)									
3.3.3	Adequate resources and funding are provided for implementing the training program.	TP.AB.2 (pg L3-27)									
3.3.4	Members of the training group have the necessary skills and knowledge to perform their training activities.	TP.AB.3 (pg L3-28)									
3.3.5	Software managers receive orientation on the training program.	TP.AB.4 (pg L3-29)									
3.3.6	Each software project develops and maintains a training plan that specifies its training needs.	TP.AC.1 (pg L3-29)									
3.3.7	The organization's training plan is developed and revised according to a documented procedure.	TP.AC.2 (pg L3-30)									
3.3.8	The training for the organization is performed in accordance with the organization's training plan.	TP.AC.3 (pg L3-32)									
3.3.9	Training courses prepared at the organization level are developed and maintained according to organization standards.	TP.AC.4 (pg L3-33)									
3.3.10	A waiver procedure for required training is established and used to determine whether individuals already possess the knowledge and skills required to perform in their designated roles.	TP.AC.5 (pg L3-34)									
3.3.11	Records of training are maintained.	TP.AC.6 (pg L3-34)									

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	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
3.3.12	Measurements are made and used to determine the <u>status</u> of the training program activities.	TP.ME.1 (pg L3-34)									
3.3.13	Measurements are made and used to determine the <u>quality</u> of the training program.	TP.ME.2 (pg L3-35)									
3.3.14	The training program activities are reviewed with senior management on a periodic basis.	TP.VE.1 (pg L3-35)									
3.3.15	The training program is independently evaluated on a periodic basis for consistency with, and relevance to, the organization's needs.	TP.VE.2 (pg L3-36)									
3.3.16	The training program activities and work products are reviewed and/or audited and the results are reported.	TP.VE.3 (pg L3-36)									

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	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
KPA: 3.4 Integrated Software Management											
3.4.1	The project follows a written organizational policy requiring that the software project be planned and managed using the organization's standard software process and related process assets.	ISM.CO.1 (pg L3-38)									
3.4.2	Adequate resources and funding are provided for managing the software project using the project's defined software process.	ISM.AB.1 (pg L3-39)									
3.4.3	The individuals responsible for developing the project's defined software process receive required training in how to tailor the organization's standard software process and use the related process assets.	ISM.AB.2 (pg L3-39)									
3.4.4	The software managers receive required training in managing the technical, administrative, and personnel aspects of the software project based on the project's defined software process.	ISM.AB.3 (pg L3-40)									
3.4.5	The project's defined software process is developed by tailoring the organization's standard software process according to a documented procedure.	ISM.AC.1 (pg L3-41)									
3.4.6	Each project's defined software process is revised according to a documented procedure.	ISM.AC.2 (pg L3-43)									
3.4.7	The project's software development plan, which describes the use of the project's defined software process, is developed and revised according to a documented procedure.	ISM.AC.3 (pg L3-44)									
3.4.8	The software project is managed in accordance with the project's defined software process.	ISM.AC.4 (pg L3-44)									
3.4.9	The organization's software process database is used for software planning and estimating.	ISM.AC.5 (pg L3-46)									
3.4.10	The size of the software work products (or size of changes to the software work products) is managed according to a documented procedure.	ISM.AC.6 (pg L3-47)									

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	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
3.4.11	The project's software effort and costs are managed according to a documented procedure.	ISM.AC.7 (pg L3-48)									
3.4.12	The project's critical computer resources are managed according to a documented procedure.	ISM.AC.8 (pg L3-50)									
3.4.13	The critical dependencies and critical paths of the project's software schedule are managed according to a documented procedure.	ISM.AC.9 (pg L3-51)									
3.4.14	The project's software risks are identified, assessed, documented, and managed according to a documented procedure.	ISM.AC.10 (pg L3-52)									
3.4.15	Reviews of the software project are periodically performed to determine the actions needed to bring the software project's performance and results in line with the current and projected needs of the business, customer, and end users, as appropriate.	ISM.AC.11 (pg L3-53)									
3.4.16	Measurements are made and used to determine the effectiveness of the integrated software management activities.	ISM.ME.1 (pg L3-56)									
3.4.17	The activities for managing the software project are reviewed with senior management on a periodic basis.	ISM.VE.1 (pg L3-56)									
3.4.18	The activities for managing the software project are reviewed with the project manager on both a periodic and event-driven basis.	ISM.VE.2 (pg L3-57)									
3.4.19	The software quality assurance group reviews and/or audits the activities and work products for managing the software project and reports the results.	ISM.VE.3 (pg L3-57)									

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SW-CMM - Level 3											
	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
KPA: 3.5 Software Product Engineering											
3.5.1	The project follows a written organizational policy for performing the software engineering activities.	SPE.CO.1 (pg L3-60)									
3.5.2	Adequate resources and funding are provided for performing the software engineering tasks.	SPE.AB.1 (pg L3-61)									
3.5.3	Members of the software engineering technical staff receive required <u>training</u> to perform their technical assignments.	SPE.AB.2 (pg L3-63)									
3.5.4	Members of the software engineering technical staff receive <u>orientation</u> in related software engineering disciplines.	SPE.AB.3 (pg L3-64)									
3.5.5	The project manager and all software managers receive orientation in the technical aspects of the software project.	SPE.AB.4 (pg L3-64)									
3.5.6	Appropriate software engineering methods and tools are integrated into the project's defined software process.	SPE.AC.1 (pg L3-65)									
3.5.7	The software requirements are developed, maintained, documented, and verified by systematically analyzing the allocated requirements according to the project's defined software process.	SPE.AC.2 (pg L3-66)									
3.5.8	The software design is developed, maintained, documented, and verified, according to the project's defined software process, to accommodate the software requirements and to form the framework for coding.	SPE.AC.3 (pg L3-69)									
3.5.9	The software code is developed, maintained, documented, and verified, according to the project's defined software process, to implement the software requirements and software design.	SPE.AC.4 (pg L3-72)									
3.5.10	Software testing is performed according to the project's defined software process.	SPE.AC.5 (pg L3-73)									

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SW-CMM - Level 3											
	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
3.5.11	Integration testing of the software is planned and performed according to the project's defined software process.	SPE.AC.6 (pg L3-75)									
3.5.12	System and acceptance testing of the software are planned and performed to demonstrate that the software satisfies its requirements.	SPE.AC.7 (pg L3-75)									
3.5.13	The documentation that will be used to operate and maintain the software is developed and maintained according to the project's defined software process.	SPE.AC.8 (pg L3-77)									
3.5.14	Data on defects identified in peer reviews and testing are collected and analyzed according to the project's defined software process.	SPE.AC.9 (pg L3-78)									
3.5.15	Consistency is maintained across software work products, including the software plans, process descriptions, allocated requirements, software requirements, software design, code, test plans, and test procedures.	SPE.AC.10 (pg L3-79)									
3.5.16	Measurements are made and used to determine the functionality and quality of the software products.	SPE.ME.1 (pg L3-80)									
3.5.17	Measurements are made and used to determine the status of the software product engineering activities.	SPE.ME.2 (pg L3-81)									
3.5.18	The activities for software product engineering are reviewed with senior management on a periodic basis.	SPE.VE.1 (pg L3-81)									
3.5.19	The activities for software product engineering are reviewed with the project manager on both a periodic and event-driven basis.	SPE.VE.2 (pg L3-81)									
3.5.20	The software quality assurance group reviews and/or audits the activities and work products for software product engineering and reports the results.	SPE.VE.3 (pg L3-82)									

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SW-CMM - Level 3											
	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
KPA: 3.6 Intergroup Coordination										Within Project? Between Proj, Counties, Sponsor, Cannery?	
3.6.1	The project follows a written organizational policy for establishing interdisciplinary engineering teams.	IGC.CO.1 (pg L3-86)									
3.6.2	Adequate resources and funding are provided for coordinating the software engineering activities with other engineering groups.	IGC.AB.1 (pg L3-87)									
3.6.3	The support tools used by the different engineering groups are compatible to enable effective communication and coordination.	IGC.AB.2 (pg L3-87)									
3.6.4	All managers in the organization receive required training in teamwork.	IGC.AB.3 (pg L3-87)									
3.6.5	All task leaders in each engineering group receive orientation in the processes, methods, and standards used by the other engineering groups.	IGC.AB.4 (pg L3-88)									
3.6.6	The members of the engineering groups receive orientation in working as a team.	IGC.AB.5 (pg L3-88)									
3.6.7	The software engineering group and the other engineering groups participate with the customer and end users, as appropriate, to establish the system requirements.	IGC.AC.1 (pg L3-88)									
3.6.8	Representatives of the project's software engineering group work with representatives of the other engineering groups to monitor and coordinate technical activities and resolve technical issues.	IGC.AC.2 (pg L3-89)									
3.6.9	A documented plan is used to communicate intergroup commitments and to coordinate and track the work performed.	IGC.AC.3 (pg L3-90)									
3.6.10	Critical dependencies between engineering groups are identified, negotiated, and tracked according to a documented procedure.	IGC.AC.4 (pg L3-91)									

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SW-CMM - Level 3											
	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
3.6.11	Work products produced as input to other engineering groups are reviewed by representatives of the receiving groups to ensure that the work products meet their needs.	IGC.AC.5 (pg L3-92)									
3.6.12	Intergroup issues not resolvable by the individual representatives of the project engineering groups are handled according to a documented procedure.	IGC.AC.6 (pg L3-92)									
3.6.13	Representatives of the project engineering groups conduct periodic technical reviews and interchanges.	IGC.AC.7 (pg L3-92)									
3.6.14	Measurements are made and used to determine the status of the intergroup coordination activities.	IGC.ME.1 (pg L3-93)									
3.6.15	The activities for intergroup coordination are reviewed with senior management on a periodic basis.	IGC.VE.1 (pg L3-94)									
3.6.16	The activities for intergroup coordination are reviewed with the project manager on both a periodic and event-driven basis.	IGC.VE.2 (pg L3-94)									
3.6.17	The software quality assurance group reviews and/or audits the activities and work products for intergroup coordination and reports the results.	IGC.VE.3 (pg L3-94)									

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SW-CMM - Level 3											
	Observations	CMM Ref	Artifact	Date	FS	PS	NS	NR	NA	Findings	Recommendation
KPA: 3.7 Peer Reviews											
3.7.1	The project follows a written organizational policy for performing peer reviews.	PR.CO.1 (pg L3-98)									
3.7.2	Adequate resources and funding are provided for performing peer reviews on each software work product to be reviewed.	PR.AB.1 (pg L3-99)									
3.7.3	Peer review leaders receive required training in how to lead peer reviews.	PR.AB.2 (pg L3-99)									
3.7.4	Reviewers who participate in peer reviews receive required training in the objectives, principles, and methods of peer reviews.	PR.AB.3 (pg L3-100)									
3.7.5	Peer reviews are planned, and the plans are documented.	PR.AC.1 (pg L3-101)									
3.7.6	Peer reviews are performed according to a documented procedure.	PR.AC.2 (pg L3-101)									
3.7.7	Data on the conduct and results of the peer reviews are recorded.	PR.AC.3 (pg L3-103)									
3.7.8	Measurements are made and used determine the status of the peer review activities.	PR.ME.1 (pg L3-103)									
3.7.9	The software quality assurance group reviews and/or audits the activities and work products for peer reviews and reports the results.	PR.VE.1 (pg L3-104)									